

# Sleep Status as a Marker for Older NZrs' Health Outcomes and Service Requirements

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# Sleep: A Pillar of Healthy Ageing



- 20-30% of older NZrs self-report sleep problems
- Sleep problems among the most disruptive behavioural symptom of dementia
- Older home-based carers report poor sleep and daytime sleepiness
- Poor sleep is associated with poorer physical and mental health status, falls, hospital admittance, and mortality

Gibson, R., Gander, P., & Jones, L. (2014) *Dementia*

Gibson, R., Gander, P., Alpass, F., & Stephens, C. (2015) *Australasian Journal on Ageing*

Gibson, R., Gander, P., Paine, S. J., Kepa, M., Dyllal, L., Moyes, S., & Kerse, N. (2016) *NZ Medical Journal*

Gibson, R., Gander, P., Kepa, M., Moyes, S., & Kerse, N (in press) *Journal of Sleep Health*

Gibson, R. & Gander, P (in press) *Dementia*

# Sleep disruptions impact...



- Exacerbated waking symptoms of age-related decline, particularly dementia
- Sleep and wellbeing of family carers
- When sleep is disrupted within informal carers more likely considering formal care within the year for family member with dementia
- The ability to age well and preferred place

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# InterRAI Sleep Project



## AIMS

1. Explore sleep as a predictor for health outcomes, admission to hospital or aged residential care, as well as mortality for people with and without dementia.
2. Describe the prevalence and risk factors of sleep problems and daytime sleepiness amongst older NZrs
3. To raise public awareness about sleep health as an important contributor to overall health and well-being for older people and those with dementia.

## SLEEP ITEMS:

1. The presence and frequency of sleep problems using a Likert scale from 1 (*not present*) to 4 (*daily*):
  - Symptoms of Insomnia: *Difficulty falling asleep or staying asleep; waking up too early; restlessness; non-restful sleep.*
  - Symptoms of excessive daytime sleepiness: *Too much sleep—Excessive amount of sleep that interferes with person's normal functioning*
2. Fatigue in relation to being able to “*complete normal daily activities*” using a Likert scale from 1 (*no fatigue*) to 4 (*unable to commence any normal day-to-day activities due to diminished energy*).

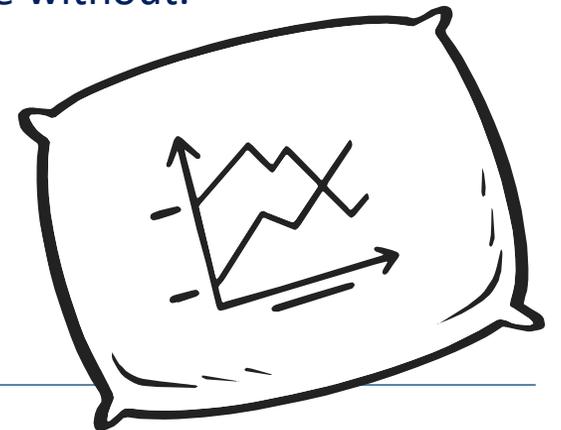
# InterRAI Sleep Project

## Methods

1. **Data request** and encrypted matching TAS, MoH and CCPS. InterRAI HC assessments July 2013 to June 2019
2. **Descriptive statistics & Univariate analysis:** prevalence of symptoms of insomnia, excessive daytime sleepiness, and the impact of fatigue on daily activities. Identify variables associated with problem sleep
3. **Logistic multiple regression and risk modelling** to assess sleep as an independent predictor for admission into an ARC or hospital (Interactions between sleep and other predictors will also be considered).

## Hypotheses:

- a) Indicators of poor sleep will be associated with increased comorbidities, poorer physical and mental health, pain, use of health services & polypharmacy.
- b) People with Alzheimer's disease or other dementia will have poorer sleep than those without.
- c) Indicators of poor sleep will be associated with exacerbated symptoms/predictors of institutionalized care & informal carer coping
- d) Indicators of poor sleep are associated with admission into ARC, hospital, and/or death either independently or in interaction with other key variables



# Implications



- Will provide valuable new information on the importance of sleep as a factor in ageing well and dementia management.
- Information and resources for older people, their families and carers, as well as health-care professionals.
- Lead to more options to empower individuals to better manage their own symptoms, providing hope for improving the sleeping and waking experience of older people and those with dementia.

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